84-250922/41 A87 F06 TEVO-09.09.81
INST TECH VOLOKON AN GDR (WOOL=) *DD -210-561-A
19.06.80-SU-942502 (+DD-233137) (13.06.84) D06m-10 D06m-13/20

Finishing treatment for synthetic fibre textiles - by treating with soln. of polyethylene-glycol-di- methacrylate contg. satd. monomer and irradiating with electrons

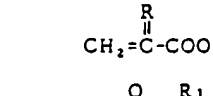
C84-105389 Full Priorities: (CMEA): 19.6.80-SU-7942502; 9.9.81-DD-2331374

METHOD CLAIMED

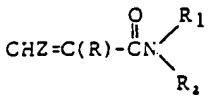
Synthetic fibre textiles are finished by

(a) treatment with an aq. soln. of a polyethylene-glycol-di-(meth)acrylate having 8-15 oxyethyl gps., contg. an unsatd. monomer of formula (I) or (II); and

(b) irradiating with fast electrons.



(I)



(II)

A(10-E7B, 11-C2B, 12-G, 12-G3) F(3-C, 3-C2, 3-C5) 026

R = H or CH_3;
R_1 = CH_2CH_2OH or $-CH_2CH_2CH_2OH$; and
R_2 = H, CH_3, $-CH_2OH$ or $-CH_2CH_2OH$.

ADVANTAGE

Treatment stabilises the antistat and hydrophilic properties of the material against repeated laundering and also imparts soil-resistant properties.

EXAMPLE

A fabric made from polycaprolactam fibre is treated for 2 mins. at 25°C in an aq. soln. contg. 15 wt.% polyethylene-glycol-di-methacrylate having 13 oxyethyl gps. and 3 wt.% 2-hydroxymethyl-acrylamide.

The fabric is then rolled out to 70% moisture, irradiated with a 2Mrad dose of fast electrons, washed and dried.

The fabric retains high antistat and hydrophobic properties after 50 laundering cycles (R). (11pp1550WADwgNo0/9).

Full Patentees: Inst Tech Volokon An Gdr; Wool Ind Res Inst.

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